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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,010	12/07/2000	Takahiro Aoki	1075.1135/JDH	8774
21171	7590	01/13/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			BHATNAGAR, ANAND P	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,010

Applicant(s)

AOKI ET AL.

Examiner

Anand Bhatnagar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/28/04 and 08/18/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-18 and 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4,6-18,20-28 and 30 is/are allowed.
- 6) ☒ Claim(s) 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's amendments filed on 06/28/04 and 08/18/04 have been entered and made of record.
2. Applicant has amended claims 1, 3, 6, 7, 9, 13, 15, 17, 20, 21, 26, 27, and 28 and has canceled claims 5 and 19 in the amendment filed on 06/28/04. Applicant has not amended any claims in the amendment filed on 08/18/04 but has added two new claims (29 and 30). Currently claims 1-4, 6-18, and 20-30 are pending. Examiner refers to the action below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. (U.S. patent 6,298,143 B1) and Tsuchikawa et al. (U.S. patent 5,748,775).

Regarding claim 29: Kikuchi et al. discloses a method of detecting a moving object (Kikuchi et al.; col. 1 lines 6 and 7), comprising:

(a) a monitoring region clipping step of clipping a monitoring region, which is to be monitored, from an input image;

(b) a region dividing step of dividing the monitoring region, which is clipped in said monitoring region clipping step, into a plurality of zones (Kikuchi et al; col. 3 lines 36-43, wherein the image(s) that have been obtained are segmented. This segmentation is read as dividing the region.);

(c) a variance calculating step of calculating a variance of brightness values for each and every one of the plural zones obtained in said region dividing step (Kikuchi et al.; col. 3 lines 43-55, wherein the brightness of the segments is determined for each region and used to determine the moving object); and

(d) an appearance detecting step of discriminating whether or not a moving object appears in the input image based on the variance calculated in said variance calculating step (Kikuchi et al.; col. 3 lines 43-55, wherein the brightness of the segments is determined for each region and used to determine the moving object).

Kikuchi et al. discloses a system wherein the input/obtained images are first segmented into zones/blocks then the brightness amount is determined for each of these zones and used to determine the presence of a moving object in the images. Kikuchi et al. does not teach to clip the monitoring region from the images nor teaches to use the variance of brightness to determine the presence of a moving object. Tsuchikawa et al. teaches to use the variance of intensity/brightness to detect the presence of a moving object (Tsuchikawa et al.; col. 5 lines 52-62 and col. 6 lines 44-61). It would have been obvious to one skilled in the art to combine the teaching of Tsuchikawa et al. to that of Kikuchi et

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al. because they are analogous in determining the presence of a moving object in images. One skilled in the art would have been motivated to incorporate the teaching of Tsuchikawa et al., modified to use the variance of brightness to detect the presence of a moving object instead of the brightness, to that of Kikuchi et al. in order to have a system wherein a moving object detection system that incorporates an environment that may have large illumination changes such as an outdoor site (col. 2 lines 42-44).

As for the clipping the monitoring region, it would have been obvious for one skilled in the art to incorporate this feature in order to make the system more efficient wherein less calculations are performed as well as less storage will be needed to store the information gathered.

Allowable Subject Matter

4. Applicant's arguments, see amendments, filed 06/28/04 (pages 12 and 13) and 08/18/04 (page 13), with respect to claims 1, 2, 4 and 26 have been fully considered and are persuasive. The 35 USC 103(a) rejection of claims 1, 2, 4, and 26 has been withdrawn.
5. Claims 1-4, 6-18, 20-28, and 30 are allowed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group fax is 703-872-9306, and Tech center 2600 customer service office number is 703-306-0377.

AB

Anand Bhatnagar

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January 8, 2005


SAMIR AHMED
PRIMARY EXAMINER